

Perspectives on Artificial Intelligence Regulation in the European Union and Türkiye: From Risk-Based Approaches to Legal Harmonization Debates^(*)

Avrupa Birliği ve Türkiye’de Yapay Zekâ Düzenlemelerine Bakış: Risk Temelli Yaklaşımlardan Hukuki Uyum Tartışmalarına

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Abstract:

This study examines the regulation of artificial intelligence, with a particular focus on the European Union's Artificial Intelligence Act (EU AI Act) and legislative initiatives in Türkiye. The paper emphasises the growing importance of AI governance, considering recent technological advances, particularly following the emergence of generative AI. The EU AI Act introduces a detailed risk-based framework that classifies AI applications into categories ranging from unacceptable to minimal risk and imposes binding obligations on developers and users of high-risk systems. By contrast, Türkiye's approach presents a more general structure, setting out guiding principles rather than specific compliance requirements. The analysis shows that Türkiye's strategy provides an institutional and political basis for governance while also leaving room for flexibility. This dual orientation reflects Türkiye's effort to strengthen national technological capacity while engaging in international co-operation and aligning with global standards. The paper argues that effective AI regulation requires a balanced approach that addresses ethical and legal concerns while supporting innovation. Within this framework, the EU AI Act stands out as a significant point of reference not only for Europe but also for countries with close economic and political ties to the EU. The findings suggest that Türkiye is likely to move gradually towards greater convergence with European standards, shaped by its economic relations, foreign policy priorities, and participation in multilateral initiatives.

Keywords:

Artificial Intelligence Regulation, EU AI Act, Digital Policy, Turkish AI Proposal, Comparative Legal Analysis.

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Öz:

Bu çalışma, yapay zekânın düzenlenmesine yönelik yaklaşımları incelemekte; özellikle Avrupa Birliği'nin Yapay Zekâ Yasası (EU AI Act) ile Türkiye'deki mevzuat girişimlerini karşılaştırmalı olarak ele almaktadır. Günümüzde, özellikle üretken yapay zekâ uygulamalarının ortaya çıkışıyla birlikte, yapay zekâ yönetişiminin önemi giderek artmaktadır. AB Yapay Zekâ Yasası, risk temelli ayrıntılı bir çerçeve sunmakta; yapay zekâ uygulamalarını kabul edilemez riskten asgari riske kadar sınıflandırmakta ve yüksek riskli sistemlerin geliştiricileri ile kullanıcılarına bağlayıcı yükümlülükler getirmektedir. Buna karşılık, Türkiye'nin yaklaşımı daha genel bir yapı arz etmekte; ayrıntılı uyum şartları yerine yönlendirici ilkeler ortaya koymaktadır. Yapılan analiz, Türkiye'nin stratejisinin kurumsal ve siyasal bir yönetim zemini oluşturduğunu, aynı zamanda esnekliğe de imkân tanıdığını göstermektedir. Bu ikili yönelim, Türkiye'nin ulusal teknolojik kapasiteyi güçlendirme çabasını, uluslararası iş birliği ve küresel standartlarla uyum sağlama arayışıyla birlikte yansıtmaktadır.

Çalışmada, etkili bir yapay zekâ düzenlemesinin etik ve hukuki kaygıları gözetirken aynı zamanda yeniliği destekleyen dengeli bir yaklaşım gerektirdiği savunulmaktadır. Bu bağlamda AB Yapay Zekâ Yasası, yalnızca Avrupa için değil, aynı zamanda AB ile yakın ekonomik ve siyasal ilişkiler sürdüren ülkeler açısından da önemli bir referans noktası niteliği taşımaktadır. Bulgular, Türkiye'nin ekonomik ilişkileri, dış politika öncelikleri ve çok taraflı girişimlerdeki katılımı doğrultusunda, Avrupa standartlarıyla giderek daha fazla uyum yönünde adım atmasının muhtemel olduğunu göstermektedir.

Anahtar Kelimeler:

Yapay Zekâ Düzenlemesi, AB Yapay Zekâ Yasası, Dijital Politika, Türkiye Yapay Zekâ Önerisi, Karşılaştırmalı Hukuk Analizi.

INTRODUCTION

Artificial Intelligence (AI) has, in recent years, become a central focus not only in scientific research and technological innovation but also in economic development strategies, public policies, and international regulations. As of 2020, the total global investment directed toward this field reached approximately USD 62.2 billion, making AI one of the technology categories receiving the highest level of investment. According to the 2021 report published by Grand View Research, investments in AI are projected to grow at an annual average rate of 42.2% between 2020 and 2027. Accordingly, the total investment volume in the AI sector is expected to reach USD 733.6 billion by 2027. As of 2024, Türkiye holds 0.2% of the global AI market, corresponding to USD 600 million. These figures reveal not only technological advancement but also the rapidly increasing interest in AI at both economic and strategic levels. As one of the most influential components of digital transformation, AI is increasingly playing a transformative role in a wide range of areas, from everyday life activities to industrial production processes, from education to healthcare, and from security to legal systems¹.

Situated at the intersection of computer science, engineering, ethics, philosophy, sociology, and law, AI has evolved beyond a purely technical or software development issue to become a multi-layered domain with profound societal,

¹ Grand View Research. (2021). Artificial intelligence market size, share & trends analysis report.

cultural, and legal implications. Historically, the initial stages of AI systems focused on narrow applications aimed at automating specific tasks. However, rapid advances in subfields such as machine learning, deep learning, and natural language processing have enabled AI systems to analyse complex problems, recognise patterns, make predictions, and, in certain situations, exhibit human-like decision-making capabilities.

According to the 2023 AI Index Report published by Stanford University, AI solutions are most intensively applied in healthcare, finance, law, education, transportation, and customer service sectors. The development and deployment of AI systems require consideration not only of technical reliability but also of ethical principles, legal regulations, societal acceptance, and accountability. Creating normative and institutional frameworks that ensure these technologies operate transparently, reliably, and fairly, while harmonizing with social structures, has emerged as a critical necessity for contemporary knowledge societies. Regulatory frameworks developed at national and international levels aim to minimize the potential risks of AI technologies while maximizing societal benefits. In this context, discussions increasingly focus not only on the accuracy and performance of algorithms but also on the impact of these technologies on human rights, personal privacy, social justice, and democratic values. In its 2021 impact assessment, the European Commission emphasized that high-risk AI applications could pose significant threats to fundamental rights, security, and democracy. This assessment, combined with broader concerns about the effects of AI on social life, the economy, and legal systems, has prompted states and international organizations to develop comprehensive regulatory strategies for AI technologies. The European Union (EU), in particular, has emerged as one of the first actors globally to propose a comprehensive legal framework for AI, balancing technological innovation with the protection of fundamental rights. The AI Act, proposed by the European Commission in 2021 and adopted in 2024, classifies AI applications based on risk levels and prescribes obligations tailored to each risk category. The EU's regulatory framework has significant implications not only for member states but also for countries engaged in trade, technology transfer, and data exchange with the EU. Within this framework, it is crucial for Türkiye to closely monitor international developments in AI regulations and systematically implement alignment policies.

Türkiye, as a country deeply integrated with the EU economically, politically, and legally, and as an active participant in the digital transformation process where AI technologies are increasingly prevalent, cannot remain outside these regulatory frameworks.

The EU's AI regulations are significant not only for setting technical standards but also for their implications for fundamental rights protection, data security, ethical responsibility, and market dynamics. Consequently, evaluating the applicability of the EU AI Regulation in Türkiye, analysing the extent to which it can be adopted and adapted, and examining its potential societal, legal, and economic effects from a multidimensional perspective are critical for both academic research and policymakers.

Artificial intelligence (AI) systems enable the execution of repetitive, service-based tasks in the field of law and hold the potential to increase the efficiency of legal processes².

However, developing solutions through AI systems based on legal data is still considered a novel concept³. Indeed, one study revealed that AI-supported systems achieved a higher accuracy rate than judges in determining whether a defendant should be tried under arrest or released pending trial⁴. With the advancement of AI and robotics, the interaction between humans and machines has become increasingly complex, thereby giving rise to new legal issues and regulatory gaps. As individuals interact with AI, they are exposed to damages arising from its use, and addressing these damages within the framework of traditional contract and tort law rules proves difficult⁵. Therefore, understanding the legal implications of AI and adapting regulations accordingly has become crucial. At this point, the fact that legal practices are carried out by various actors causes the integration of AI into judicial processes to occur more gradually compared to other sectors⁶. Nevertheless, AI's susceptibility to human rights violations, including threats to democracy, the rule of law, bias, discrimination, and cyberattacks, raises several concerns. Issues such as data privacy, transparency, accountability, lack of clear recourse among injured parties, and uncertainty in causation further deepen legal anxieties⁷.

² Gökçe Erdoğan, "A General Overview of Artificial Intelligence and Law", *Adalet Dergisi*, no. 66 (2021): 117-192.

³ Turan, T., Kemaloğlu, N., and Küçüksille, E. "Artificial Intelligence in Law: Studies and Future Prospects." *Mehmet Akif Ersoy University Journal of Graduate School of Natural and Applied Sciences* 11, no. 2 (2020): 246-255. <https://doi.org/10.29048/makufebed.748843>.

⁴ Zeytin, Z., and Gençay, E. "Law and Artificial Intelligence: E-Person, Financial Liability, and a Legal Practice." *Turkish-German University Faculty of Law Journal* 1, no. 1 (2019): 39-70.

⁵ Bak, B. "Legal Status of Artificial Intelligence and Legal Consequences Arising from Its Use in Civil Law." *Türkiye Adalet Akademisi Dergisi*, no. 35 (2018): 211-232.

⁶ Yılmaz, O. G. "Use of Artificial Intelligence in Judicial Practice: Could an AI Judge Wear a Robe?" *Adalet Dergisi*, no. 66 (2021): 379-415.

⁷ Karabal, A. "Legal Violations in Artificial Intelligence." *Metazihin: Journal of Artificial Intelligence and Philosophy of Mind* 6, no. 2 (2023): 119-147. <https://doi.org/10.51404/metazihin.1269258>.

Accordingly, discussions on the legal status of AI first require an assessment of whether legal personality should be granted to AI⁸. In addition, the establishment of cyber defence mechanisms and the development of specific laws to combat cybercrime would not only enhance the effectiveness of AI-related efforts but also help mitigate cyber risks on both national and international levels⁹. However, the question of liability for damages caused by AI remains a central area of debate. Since AI is not legally recognized as a person under current regulations, it cannot itself be held responsible, raising the issue of who should bear liability and on what grounds¹⁰.

At this point, AI should be examined within the framework of tort liability, with due regard to its types and levels of autonomy and to existing provisions on fault and strict liability¹¹.

Moreover, AI is rapidly spreading across multiple domains such as information technologies, medicine, industry, and law. In this respect, studies conducted within the framework of international law have examined potential areas of AI application, proposed step-by-step methods for implementation, and analysed potential risks. Ultimately, national and international developments in AI are argued to have the potential to profoundly affect fundamental human rights and the international legal order. The use of autonomous weapons, for instance, threatens the right to life and civilian protection, while content personalization applications pose risks to freedom of expression, and the processing of personal data jeopardizes the right to privacy. Therefore, legal debates that address both the positive and negative aspects of AI, while considering the guiding work of international organizations, are gaining increasing importance.

1. Artificial Intelligence Regulations Worldwide

In 2023, the United States issued an Executive Order on Artificial Intelligence, directing federal agencies to establish a framework for the safe, ethical, and non-discriminatory use of AI systems. China adopted a stringent regulatory

⁸ Kağıtçıoğlu, M. "Artificial Intelligence and Administrative Law: An Assessment from Today Towards the Future." Hacettepe University Faculty of Law Journal 11, no. 1 (2021): 118-168. <https://doi.org/10.32957/hacettepehdf.874993>.

⁹ Can, E. "The Role of Artificial Intelligence Systems in Combating Cybercrimes: An Examination of Informatics and International Law." Ankara Hacı Bayram Veli University Faculty of Law Journal 27, no. 3 (2023): 345-382. <https://doi.org/10.34246/ahbvuhfd.1306712>.

¹⁰ Güner, C. "The Law Applicable to Non-Contractual Liability Arising from Damages Caused by Artificial Intelligence." Uyuşmazlık Mahkemesi Dergisi, no. 15 (2020): 229-272. <https://doi.org/10.18771/mdergi.757376>.

¹¹ Benli, E., and Şenel, G. "Artificial Intelligence and Tort Law." Ankara Social Sciences University Faculty of Law Journal 2, no. 2 (2020): 296-336. <https://doi.org/10.47136/asbuhfd.713190>.

approach focusing on content control and algorithmic transparency through the Algorithmic Recommendation Services Regulation, effective in 2022, and guidelines concerning generative AI introduced in 2023.

The United Kingdom has, through its 2021 National AI Strategy and the 2023 AI White Paper, favoured a sectoral guidance approach, delegating authority to regulatory bodies rather than enacting a centralised legislative framework. Canada, with the 2022 proposed Artificial Intelligence and Data Act (AIDA), aims to legislate regulations for high-risk AI applications. Japan, since 2019, has embraced a human centred and ethically focused approach under its AI Governance Principles, whereas South Korea, through its 2019 AI National Strategy, has set the goal of becoming an AI leader by 2030.

These historical developments indicate that countries develop regulatory approaches tailored to their socio-political contexts, highlighting the growing need for international cooperation in terms of global harmonization and ethical standards.

2. European Union Artificial Intelligence Act

The European Union's Artificial Intelligence Act (AI Act) is a legislative proposal put forward by the European Commission, designed to ensure the development, use, and governance of artificial intelligence in a safe, ethical, and human rights-compliant manner. The primary objective of the proposal is to control the potential risks associated with the rapid development and deployment of AI technologies while simultaneously promoting innovation.

The EU AI Act encompasses the following core elements:

1. Risk-Based Regulation,
2. Transparency and Accountability,
3. Data and Privacy,
4. Ethics and Human Rights,
5. AI Auditing and Certification,
6. International Cooperation.

The Act aims to establish a comprehensive oversight mechanism, particularly considering the societal impact and safety of AI systems. Furthermore, it seeks to promote alignment with AI practices in non-EU countries. As part of the EU Digital Single Market, this legislative framework represents a comprehensive regulatory package intended to ensure the responsible use of AI technologies.

METHOD AND METHODOLOGY

1. Comparative Approach

Comparative law, at its core, involves examining the laws of different countries in relation to one another. Most often, this means placing a foreign legal system side by side with one's own to identify points of convergence and divergence. However, this comparison can extend well beyond that involving multiple legal systems, non-legal elements, and unwritten practices. The true value lies in setting one body of legal data against another and analysing their similarities and differences, with the aim of gaining insight into their structure, purpose, and scope. Importantly, comparative law is not a fixed set of rules or a defined legal system. Rather, it is a method a way of engaging with legal material that opens the door to observations and understandings that might remain hidden if one were to study only a single jurisdiction.

It's about perspective, about adopting a broader analytical lens. This method often yields practical benefits: it can highlight successful solutions from other systems or help pre-empt challenges by learning from foreign experience. The act of comparison itself is not unique to law; it is a common tool in many disciplines, from social sciences to natural sciences, including economics, linguistics, and even architecture. Over time, comparative law has evolved: it emerged in the nineteenth century, matured throughout the twentieth century, and is now attracting more attention than ever. While it was once regarded as a niche academic pursuit, interesting but removed from legal practice, recent decades have seen a shift. This change might be attributed to the process of European integration, the realities of an increasingly interconnected world, or simply the desire of legal thinkers to approach new and complex legal issues from fresh, informed angles. An increasing number of newly established journals now feature 'Comparative Law' in their titles, and the publication of articles with comparative content in these journals has risen significantly by four times in recent years. For scholars pursuing doctorates, as well as for judges and legislators, consulting legal materials from other jurisdictions has become a routine part of their work. It is entirely plausible to anticipate that the twenty-first century will be recognised as the era of comparative law. There is a noticeable resurgence of interest in comparative law, which is applied in academic research, legal reform, policymaking, education, international legal practice, and judicial processes, serving a range of practical, sociological, political, and pedagogical purposes. Comparative law constitutes an autonomous scientific discipline that produces theoretical knowledge within its own distinct domain. It functions as a criti-

cal methodological approach in legal science, mirroring the inherent cognitive process of understanding through systematic comparison of similarities and differences. For scholars, often referred to as 'scholarly comparative law, its principal objective is to facilitate access to legal knowledge that informs law reform, supports research, promotes international legal cooperation, and advances the comprehensive understanding of law as a universal phenomenon. As articulated by Richard Tur, general jurisprudence and comparative law are fundamentally interdependent: jurisprudence devoid of comparative analysis is vacuous and merely formalistic, whereas comparative law without jurisprudential grounding lacks direction and discriminative capacity. Their integration yields a robust and nuanced framework essential for the advancement of legal knowledge¹².

The objective of comparative law is neither to establish a uniform legal system worldwide nor to create an exhaustive multilingual legal terminology dictionary. Instead, its primary aim is to analyse and understand the differences between legal systems and institutions, providing explanations that enhance legal understanding. Concurrently, it endeavours to identify similarities across diverse legal traditions and to interpret the underlying reasons for these commonalities¹³. As early as 1938 it was said by Harold Gutteridge that: We have much to learn from one another in legal as well as other departments of human activities, and it is, in a sense, a reproach to the lawyers of all nations that they have been unable, up to the present, to arrive at the free interchange of knowledge and ideas which has been attained in other branches of learning¹⁴. In a general way, Patrick Glenn lists comparative law as an instrument of learning and knowledge (information on the law elsewhere and a better understanding thereof), comparative law as an instrument of evolutionary and taxonomic science (common evolutions, diachronic changes, legal families), contributing to one's own legal system (understanding it better, including the resistance of its traditions, improving it, using it as a means for interpreting the constitution), and harmonization of law¹⁵.

Scholars of comparative law hold diverse views regarding its nature: some conceive it as an autonomous scientific discipline with a distinct domain, while others regard it merely as a method or technique for study and research. Several

¹² Tur, RHS (1977) 'The Dialectic of General Jurisprudence and Comparative Law' *Juridical Review* 238.

¹³ Comparative Law A Handbook, Esin Örüçü and David Nelken Oxford and Portland, Oregon, 2007, p. 64.

¹⁴ Gutteridge, HC (1938) 'The comparative aspects of legal terminology' 12 *Tulane Law Review* 401.

¹⁵ In the Elgar Encyclopedia of Comparative Law (Glenn 2006). Compare the 'purposes of comparative law research' as listed by Esin Örüçü (2007, p. 53-56).

commentators recognize both perspectives, treating comparative law as both a methodological approach and an independent science. Nonetheless, those who define it solely as a method often fail to clearly specify the nature of that method, whereas proponents of a broader understanding of comparative law lack consensus on its exact scope and subject matter. Practitioners with particular aims may confine their comparative inquiries to addressing specific legislative or judicial issues by examining foreign legal systems.

This study aims to compare the EU AI Act and the AI Bill of Türkiye, focusing on their differences and similarities. The objective of this comparison is to illustrate that legal standards for protection in emerging fields such as artificial intelligence is not uniform worldwide, largely due to variations in legal traditions, sociocultural values, and the diverse structures of international societies.

2. Comparative Analysis

In April 2021, the European Commission unveiled the EU's inaugural AI legislation, featuring a framework that categorizes AI systems based on the level of risk they may present to users. Each system is assessed and placed into a specific risk category¹⁶.

We will compare the EU AI Act & The AI Bill of Türkiye.

1. To begin with, it's important to note that the EU AI Act has undergone a lengthy development process. Initially drafted in 2021, the legislation was finalized last year, incorporating provisions aimed at ensuring the safety of AI models and maintaining human oversight, especially as general-purpose AI technologies like large language models (LLMs) have become more prevalent. In contrast, the proposed AI bill in Türkiye is still at the proposal stage rather than a fully developed draft. As such, it's understandable that it lacks the depth and detail of a comprehensive law.
2. It is only about 10% the length of the EU AI Act and is significantly simpler and less extensive in its content. Nevertheless, the proposal represents a promising first step toward establishing fundamental principles¹⁷.
3. The EU AI Act strictly prohibits the use of artificial intelligence in certain areas, such as:
 - Misleading or manipulating individuals, particularly by exploiting their vulnerabilities

¹⁶ <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence#ai-regulation-in-europe-the-first-comprehensive-framework-4>.

¹⁷ <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai#ecl-inpage-why-do-we-need-rules-on-ai?>

- Collecting sensitive personal information without consent, especially when it results in discrimination or bias
- Implementing social scoring systems that influence access to jobs or public services
- Using real-time facial recognition or surveillance in public areas without informed consent
- Monitoring or interpreting emotions in schools or workplaces¹⁸

First of all, Türkiye's bill outlines key principles that artificial intelligence systems must adhere to, without imposing strict limitations on their areas of application¹⁹:

- **Safety:** AI systems should operate securely and minimize risks.
- **Transparency:** The functioning and processes of AI should be clear and easily understood.
- **Fairness:** AI must act without bias and ensure equitable treatment for all.
- **Accountability:** It should be possible to identify and audit the individuals or institutions responsible for AI outcomes.
- **Data Protection:** AI must respect personal data privacy and uphold confidentiality standards

Secondly, the EU AI Act offers much clearer definitions for the various actors involved in artificial intelligence compared to Türkiye's draft bill.

This clarity is especially important because legal sanctions under the EU regulation are directly based on these definitions²⁰. The EU AI Act features a detailed Article 3 consists of 68 session solely dedicated to definitions. It covers a wide range of terms from broad concepts like artificial intelligence and risk to more specific roles such as AI model distributor and AI model importer. Türkiye's bill also defines terms such as artificial intelligence, provider, distributor/user, importer, and AI operator²¹. While these terms are not commonly used in

¹⁸ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 5, Official Journal of the European Union, L series, 12.7.2024.

¹⁹ 24 Haziran Yapay Zeka Kanun Teklifi, Madde 3, <https://cdn.tbmm.gov.tr/KKBSPublicFile/D28/Y2/T2/WebOnergeMetni/e50ccc8a-ab90-45fa-a553-76b880c78fb8.pdf>.

²⁰ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 3, Official Journal of the European Union, L series, 12.7.2024.

²¹ 24 Haziran Yapay Zeka Kanun Teklifi, Madde 2, <https://cdn.tbmm.gov.tr/KKBSPublicFile/D28/Y2/T2/WebOnergeMetni/e50ccc8a-ab90-45fa-a553-76b880c78fb8.pdf>.

everyday language, they are crucial for legal interpretation and generally align with the EU AI Act's definitions. These definitions are particularly significant in the sections that outline responsibilities and penalties. The EU AI Act differentiates among various roles (e.g., distributors, model developers, model distributors), assigning specific duties and sanctions to each²².

Conversely, the Turkish bill groups all these roles under one category artificial intelligence operators and applies penalties broadly to all participants within the AI ecosystem, as defined in the bill²³. It defined AI Operators as enumerated below; this definition is intentionally broad, encompassing all key stakeholders within the artificial intelligence ecosystem. It includes providers who create AI technologies, distributors who supply or sell AI products, users who implement or apply these technologies, as well as importers who bring AI systems into the country. By covering this wide range of actors, the definition ensures that everyone involved in the AI lifecycle is accounted for under the law²⁴. This comprehensive scope is important because it establishes clear responsibilities for each party, regardless of their specific role. Whether developing, distributing, or using AI systems, all operators must comply with the regulations and standards set forth. As such, the concept of Artificial Intelligence Operators serves as a foundational element in the legal framework, guiding the allocation of duties, accountability, and enforcement measures across the entire AI ecosystem. For example, the draft proposal does not clearly indicate who will be held responsible for non-compliance. While fines of up to 15 million TL or 3% of annual turnover are meant to deter violations, it's unclear whether they would apply to the developer of a non-compliant AI model, the user who deploys it, or a distributor in Türkiye²⁵. This lack of clarity creates legal uncertainty, making it difficult for stakeholders to understand their obligations. As a result, the ambiguity may discourage participation in AI development and slow progress in the field.

²² Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 99, Official Journal of the European Union, L series, 12.7.2024.

²³ 24 Haziran Yapay Zeka Kanun Teklifi, Madde 6, <https://cdn.tbmm.gov.tr/KKBSPublicFile/D28/Y2/T2/WebOnergeMetni/e50ccc8a-ab90-45fa-a553-76b880c78fb8.pdf>.

²⁴ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 3, Official Journal of the European Union, L series, 12.7.2024.

²⁵ 24 Haziran Yapay Zeka Kanun Teklifi, Madde 6, <https://cdn.tbmm.gov.tr/KKBSPublicFile/D28/Y2/T2/WebOnergeMetni/e50ccc8a-ab90-45fa-a553-76b880c78fb8.pdf>.

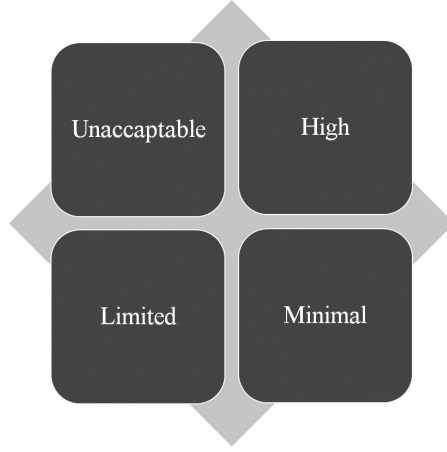


Figure.1 EU. AI Act defines 4 levels of Risk²⁶:

Unacceptable risks such as harmful AI-based manipulation and deception, social scoring, harmful AI-based exploitation of vulnerabilities and etc. are banned²⁷.

AI systems that pose serious risks to health, safety, or fundamental rights are classified as **high-risk**. These include: **AI safety components in critical infrastructure** (e.g. transport), where failure could endanger lives. **AI used in education** that impacts access to education or professional paths (e.g. exam scoring) and etc²⁸.

On the other hand, in Turkish proposal there is no risk-based approach and you can find only one general article concerning the risk assessment.

It says that risk assessments shall be conducted during the development and use of artificial intelligence systems, and special measures shall be adopted

²⁶ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 5, Official Journal of the European Union, L series, 12.7.2024.

²⁷ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 5, Official Journal of the European Union, L series, 12.7.2024.

²⁸ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 6, Official Journal of the European Union, L series, 12.7.2024.

for systems that pose high risks. High-risk artificial intelligence systems shall be registered with the relevant supervisory authorities and subjected to a conformity assessment²⁹.

For the last category of the Risk we can say that The AI Act does not introduce rules for AI that is considered minimal or no risk. The vast majority of AI systems currently used in the EU fall into this category. This includes applications such as AI-enabled video games or spam filters³⁰. Limited-risk AI systems require **transparency** to maintain user trust. Key obligations include: **Disclosure** when people interact with AI systems like chatbots, so users know they're communicating with a machine³¹.

Thirdly and finally, while general-purpose artificial intelligence systems are extensively regulated under the EU AI Act, it is noteworthy that the draft legislation in Türkiye does not make any reference to such models. The development of these models, which form the basis of advanced and multi-purpose systems such as ChatGPT, requires substantial financial resources amounting to millions of dollars and a considerable level of computational power. Although existing models are not yet regarded as an immediate threat, experts monitoring their rapid acquisition of new capabilities anticipate the emergence of far more powerful and potentially high-risk models in the near future. Consequently, ensuring that such systems are developed in a manner that is safe, transparent, and aligned with human values is of critical importance.

CONCLUSION

This paper examines the differences in artificial intelligence regulation, with particular attention to the EU AI Act and the Turkish proposal. In recent years especially since the rise of generative AI in 2021-2022 the regulation of AI has gained significant importance. It can be stated that unresolved issues, such as ethical dilemmas and copyright disputes, remain barriers to effective governance. On the one hand, AI applications span diverse sectors; and, the limited number of precedents makes it difficult to establish a clear regulatory scope and purpose.

²⁹ 24 Haziran Yapay Zeka Kanun Teklifi, Madde 4, <https://cdn.tbmm.gov.tr/KKBSPublicFile/D28/Y2/T2/WebOnergeMetni/e50ccc8a-ab90-45fa-a553-76b880c78fb8.pdf>.

³⁰ <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai#ecl-inpage-a-risk-based-approach>.

³¹ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Art. 50, Official Journal of the European Union, L series, 12.7.2024.

Existing regulatory initiatives vary across regions and countries, underscoring the need for greater harmonisation, particularly in relation to online AI systems. This is an area that requires harmonisation, as we live in a global village. Ad hoc approaches are not effective in the context of AI regulation. To ensure successful implementation, active engagement from both public authorities and the private sector, especially leading technology firms, is required.

Furthermore, research centres play an essential role in this process, as they provide critical support to start-ups and drive innovation in responsible AI practices. In terms of international developments in AI regulation, it can be stated that the EU AI Act stands as a pivotal reference point in the evolving global discourse on artificial intelligence regulation, shaping not only policy approaches within Europe but also influencing the digital strategies of different regions.

The growing number of states are making arrangements about AI regulation and EU Act will be a potential model for subsequent legislative initiatives. In this context, Türkiye emerges as an important regional actor, both in terms of its expanding investments and its strategic ambitions in the AI sector. The National Artificial Intelligence Strategy (2021-2025) demonstrates Türkiye's forward-looking approach. However, there are also notable differences with EU Act. The EU AI Act adopts a risk-based classification system, distinguishing between unacceptable, high-risk, limited-risk, and minimal-risk AI applications, and imposing strict compliance obligations on providers and users of high-risk systems. By contrast, Türkiye's National Strategy does not yet articulate a similarly detailed legal framework for risk categorization. Turkish AI Proposal is more general. Besides, Türkiye's AI strategy can be seen as complementary to the EU AI Act: it provides the political and institutional groundwork for AI governance while maintaining flexibility, whereas the EU Act represents a fully articulated regulatory structure. This dual trajectory suggests that Türkiye may gradually converge with EU regulatory standards, especially given its economic ties with Europe and the necessity of harmonization for digital trade and cross-border AI applications. In general, Türkiye's approach to artificial intelligence governance demonstrates a dual orientation: it emphasizes nationally driven policies aimed at strengthening domestic technological capacity, while simultaneously prioritizing international cooperation and actively seeking alignment with emerging global innovations. This dual strategy suggests that Türkiye may eventually develop its own regulatory framework, informed by international best practices, while also considering participation in multilateral agreements or incorporating elements from established transnational models, such as the EU AI Act.

The development of AI regulation in Türkiye cannot be interpreted solely through a technological perspective; it must also be contextualized within the broader framework of the country's foreign policy, economic relations, and strategic priorities. Türkiye's strong economic ties with the European Union its largest trading partner create significant incentives for regulatory convergence, facilitating digital trade and ensuring compatibility with EU standards.

Furthermore, Türkiye's engagement in international organizations, including the OECD and the Council of Europe, demonstrates its willingness to participate in multilateral governance initiatives, particularly in digital and technological domains.

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